15

IN THE CLAIMS:

Coloured polymer composition comprising

: 8-12-99 :

a propylene polymer nucleated with a polymerized vinyl compound and having an at least 7 °C higher crystallization temperature than that of the corresponding non-nucleated polymer, and

- a colour pigment having a concentration of 0.01 to 5 wt-% calculated from the weight of the nucleated propylene polymer.
- 2. The composition according to claim 1, wherein the colour pigment has a nucleating effect on the propylene polymer.
 - 3. The composition of claim for 2, wherein the shrinkage of the composition, calculated by comparing the measured dimension of an injection moulded box with the nominal mould dimension, varies less than 5% for different colour pigments.
 - 4. The polymer composition according to claim 1, wherein the propylene polymer contains about 0.0001 to 1 % by weight of units derived from a vinyl compound of the formula

 R_2

wherein R₁ and R₂ together form a 5 or 6 membered saturated or ansaturated or aromatic ring or they stand independently for a lower alkyl comprising 1 to 4 carbon atoms.

- 5. The polymer composition according to claim 4, wherein the propylene polymer contains cycloalkane units, in particular vinyl cyclohexane, vinyl cyclopentane, vinyl-2-methyl cyclohexane and vinyl norbornane, 3-methyl-1-butene, styrene, p-methyl-styrene or 3-ethyl-hexene units or mixtures thereof.
- 6. The polymer composition according to any of claims 1 to 3, wherein the nucleated

0

30

25

15

20

25

30

propylene polymer comprises a propylene polymer copolymer polymerized in the presence of a catalyst modified with a polymer containing vinyl compound units.

- 7. The polymer composition according to <u>suny of claims 1 to 5</u>, wherein the nucleated propylene polymer comprises a propylene homo- or copolymer blended with a polymer containing polymerised vinyl compound units.
- 8. The polymer composition according to the preceding claims, wherein the pigment is selected from the group of white pigments, yellow/orange pigments, red/violet pigments, blue/green pigments and carbon black.
 - 9. The polymer composition according to claim 8, wherein the pigment is selected from the group of titanium dioxide, isoindolinone, azocondensation, quinacridone, diketo pyrrolo pyrol, ultramarine blue, Cu Phtalocyanine blue and carbon black.
 - 10. A process for preparing a coloured polymer composition comprising a propylene polymer and a colour pigment, characterized by using a propylene polymer nucleated with a polymerized vinyl compound and having an at least 7 °C higher crystallization temperature than the corresponding non-nucleated polymer, the concentration of the colouring pigment being 0.01 to 5 wt-% calculated from the weight of the nucleated propylene polymer,.
 - 11. The process according to claim 10 wherein 100 parts by weight of a nucleated polypropylene composition containing about 0.0001 to 1 % by weight of units derived from a vinyl compound of the formula

$$R_1$$

wherein R₁ and R₂ together form a 5 or 6 membered saturated or unsaturated or aromatic



22

ring or they stand independently for a lower alkyl comprising 1 to 4 carbon atoms is blended with 0.01 to 5 parts by weight of a colouring pigment selected from the group of white pigments, green pigments, red pigments, blue pigments and carbon black, to provide a coloured polypropylene composition, the shrinkage of which varies less than 5 % for different colour pigments, said shrinkage being calculated by comparing the measured dimension of an injection moulded box with the nominal mould dimension.

B) s

-

10

- 12. Use of a polymer composition according to any of claims 1 to 9 for the manufacture of polymer articles by injection moulding or compression moulding, thermoforming, blow moulding, film or sheet extrusion, pipe or cable extrusion.
- 13. The use of claim 12, wherein caps and closures for food, household, hygiene and health-care applications are manufactured.

tag ba